



**FINAL REPORT OF THE  
LATIN AMERICA AND CARIBBEAN  
HEALTH AND NUTRITION SUSTAINABILITY  
CONTRACT**



**University Research Corporation and  
International Science and Technology Institute, Inc.**

**Prepared for the U.S. Agency for International Development under  
Contract No. LAC-0657-C-00-0051-00 LAC Health and Nutrition Sustainability**



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## **EXECUTIVE SUMMARY**

This report describes the activities and accomplishments of the five-year Latin America and Caribbean Health and Nutrition Sustainability (LAC HNS) contract, which operated from September 26, 1990 to December 31, 1995. LAC HNS was funded by the U. S. Agency for International Development under contract No. LAC-0657-C-00-0051-00 with University Research Corporation. The purpose of the LAC HNS contract was to provide a core group of long-term and short-term consultants who would deliver specific services in response to requests from the Office of Health, Population and Nutrition of A.I.D.'s Latin American and Caribbean Bureau (LAC/DR/HPN) and USAID Missions in three priority areas identified by the LAC Bureau: health management, health financing and nutrition.

LAC HNS was implemented as a partnership between University Research Corporation (URC), as prime contractor, and International Science and Technology Institute, Inc. (ISTI) as major subcontractor. URC was responsible for overall project management, administrative support and the management component, while ISTI staff directed the nutrition and financing components. Over the course of the contract, URC and ISTI subcontracted specific pieces of work to other firms to take advantage of specialized expertise, including the Association for University Programs in Health Administration, The Development Group, Inc., Management Sciences for Health, the Urban Institute, and The Population Council. LAC HNS actively sought opportunities for coordination with other A.I.D.-funded projects to share expertise and resources, including MotherCare, the WELLSTART Expanded Program for Breastfeeding, the Quality Assurance Project, and the Rational Pharmaceutical Management Project. LAC HNS also facilitated coordination of USAID objectives and strategies with project design efforts of other major donor agencies.

During its five-year implementation, LAC HNS developed a total of 9 tools for policy analysis, prepared 21 strategies and assessments, carried out 13 project design and evaluation assignments, conducted 44 special studies, and organized 25 regional and national workshops related to health management, financing and nutrition.

### **Health Management**

Technical assistance for project design and evaluation and specific country assessments proved to be the LAC HNS services most frequently requested by USAID Missions. Additionally, through relatively large, multi-year Mission buy-ins, LAC HNS provided longer-term technical support for a variety of issues related to improving the management of health services in Paraguay, Jamaica and Bolivia, focussing on the areas of organizational development, decentralization, management training, financial management, divestment and privatization, and quality assurance. Other major management activities included special studies on introducing quality improvement activities in the health facilities in Costa Rica and Guatemala, the development of indicators for assessing the adequacy of management systems to support child survival, and the field testing in Latin America of pharmaceutical management indicators.

## **Health Financing**

LAC/DR/HPN and LAC HNS decided early in the contract that its major regionally funded health financing initiative would be a multi-country analysis of the recurrent costs of primary health care services, as an input to efforts to focus Ministry of Health attention on how to improve efficiency in the delivery of priority health services. In response to USAID Mission interest, recurrent cost analyses were conducted in Belize, Bolivia, Guatemala, Nicaragua, Paraguay and Peru in the period between 1991 and 1993. The contract provided long-term technical assistance in cost recovery and insurance scheme development to the Health Sector Initiatives Project in Jamaica and assisted hospitals in Bolivia to implement cost recovery schemes. LAC HNS also developed a number of case studies on innovative financing experiences which were disseminated through workshops and technical reports.

## **Nutrition**

LAC HNS pursued various strategies for increasing awareness among host country policymakers and USAID staff of cost-effective options for intervening on nutritional problems, which continue to be prevalent in the LAC region. These included special studies to identify ways to increase the effectiveness of food aid and examine the impact on family income and food consumption of programs promoting non-traditional agricultural exports; the development of indicators to measure the impact of economic policies on household food security; regional workshops; and a series of field studies to document the costs and effectiveness of breastfeeding promotion, micronutrient delivery systems, and PL480 Title II food aid programs.

As a final product of five years' efforts in studying nutrition programs and policies in the region, LAC HNS developed a set of sectoral policy guidelines that USAID Missions, the LAC Bureau and host-country policy-makers can use for decision-making related to investments in nutrition. These guidelines provide information on alternative policy options and concrete guidance for informed decisions regarding selection of the most appropriate and affordable mix of policies and programs in the health, agriculture and education sectors which are supportive of nutritional improvement.

One of the most far-reaching products of A.I.D.'s investment in LAC HNS was the contract's contributions to advancing the state-of-the-art of cost-effectiveness analysis of nutrition interventions. LAC HNS brought together experts in economics, food, nutrition and agriculture to apply costing techniques and develop expert consensus on meaningful yet practical indicators and methodologies to document the full range of effects of nutritional interventions.

## ACRONYMS

ADAI	Ateneo de Agro Industria
A.I.D.	United States Agency for International Development
AUPHA	Association of University Programs in Health Administration
CEA	Cost-effectiveness Analysis
DGI	The Development Group, Inc.
FAO	Food and Agriculture Organization
HNTSS	Health and Nutrition Technical Services Support
HPN	Health, Population and Nutrition
HSIP	Health Sector Initiatives Project
IISP	INCAP Institutional Strengthening Project
INCAP	Institute of Nutrition of Central America and Panama
ISTI	International Science and Technology Institute, Inc.
KAP	Knowledge, attitudes and practices
LAC	Latin America and Caribbean
LAC/DR/HPN	Office of Health, Population and Nutrition of the LAC Bureau
LAC HNS	Latin America and Caribbean Health and Nutrition Sustainability
MOH	Ministry of Health
MSH	Management Sciences for Health
NGO	Non-governmental Organization
PAHO	Pan American Health Organization
PHC	Primary Health Care
PID	Project Identification Document
PP	Project Paper
PVO	Private Voluntary Organization
ROCAP	USAID Regional Office for Central America and Panama
TSO	Technical Services Order
URC	University Research Corporation
USAID	Country Mission of the U.S. Agency for International Development
WHO	World Health Organization

## **I. INTRODUCTION**

This report describes the activities and accomplishments of the five-year Latin America and Caribbean Health and Nutrition Sustainability (LAC HNS) contract, which operated from September 26, 1990 to December 31, 1995. LAC HNS was funded by the U. S. Agency for International Development under contract No. LAC-0657-C-00-0051-00 with University Research Corporation.

### **A. Contract Objectives**

LAC HNS was the core technical services contract within the LAC/DR/HPN regional Health and Nutrition Technical Services Support (HNTSS) Project, which was funded from 1989-1995 and also included a cooperative agreement with the Association of University Programs in Health Administration (AUPHA) and approximately \$20 million in funding for "Special Concerns" such as cholera prevention and control. The purpose of the LAC HNS contract was to provide a core group of long-term and short-term consultants who would deliver specific services in response to requests from the Office of Health, Population and Nutrition of A.I.D.'s Latin American and Caribbean Bureau (LAC/DR/HPN) and USAID Missions, in three priority areas identified by the LAC Bureau: health management, health financing and nutrition. The original four-year contract was given a no-cost extension until December 31, 1995, giving the contract a total life of 63 months.

The Statement of Work for the LAC HNS contract called for the contractor to address the three areas through technical assistance for project design and evaluation; strategy development; operations research, special studies and cross-cutting evaluations; regional, sub-regional and national workshops; and monitoring and tracking activities in the LAC region. The contract included a large, regionally funded "core" component intended to cover the costs of the long-term staff, project administration, information dissemination, and a certain number of special studies, workshops and technical assistance activities. The bulk of country-based activities were intended to be funded through USAID Mission buy-ins to the contract, which were executed through Technical Services Orders.

The substantive content areas for the contract's prescribed activities were determined by LAC HNS staff in close coordination with the A.I.D. Project Manager. These were articulated as objectives for each of the three areas covered by LAC HNS and are shown in Box 1. While a technical services contract which responds to Mission requests must in large part craft its activities to meet the specific needs of its clients, LAC HNS pursued these themes through its regionally funded special studies and dissemination activities.

### **B. Contract Organization and Staffing**

LAC HNS was implemented as a partnership between University Research Corporation (URC), as prime contractor, and International Science and Technology Institute, Inc. (ISTI) as major subcontractor. URC staff on LAC HNS had responsibility for overall project



## **BOX 1**

### **LAC HNS Objectives**

#### **Health Management Component**

- Expand HPN capability to develop programs in management and address management-related policy issues
- Increase awareness of the importance of good management on improving quality of care and reducing costs
- Strengthen the management of health care institutions in the LAC region: organization, systems, staff skills

#### **Health Financing Component**

- Increase and diversify the sources of funds for health care services: resource mobilization, sustainability
- Improve and shift the allocation of resources to attain greater access for priority populations and focus resources on most effective and appropriate health services: targeting for greater efficiency, equity
- Improve efficiency of the health sector: productivity, maximize outputs/minimize resources, linkage with management component
- Increase awareness and understanding of economic issues facing the health sector: policy analysis and dialogue

#### **Nutrition Component**

- Promote the integration of nutrition into broader economic and agricultural policy development
- Improve the cost-effectiveness and sustainability of nutrition programming by documenting the costs and effectiveness of selected interventions and developing monitoring indicators and tools for cost-effectiveness analysis

management, administrative support, and the management component. ISTI staff were responsible for the nutrition and financing components and provided mid-level technical support to all three components. URC and ISTI supplied most of LAC HNS' short-term technical assistance needs, with URC providing consultants in the area of health management and ISTI in the area of nutrition, and both companies providing consultants in health financing.

During its original four-year period, the LAC HNS contract was managed by the Office of Health, Population and Nutrition of the LAC Bureau (LAC/DR/HPN). In October 1994, oversight of the LAC HNS contract was passed from LAC/DR/HPN to the Office of Health and Nutrition of the Global Bureau.

The core staff and A.I.D. Project Managers over the course of the LAC HNS contract are listed in Box 2.

Over the course of the contract, URC and ISTI subcontracted specific pieces of work to other firms to take advantage of specialized expertise. These other LAC HNS subcontractors included The Development Group, Inc. (DGI), for logistical management of the HPN Officers' conference in Miami in September 1991 and recurrent cost analyses in Peru, Bolivia and Nicaragua; the Association for University Programs in Health Administration (AUPHA) for management training activities in Paraguay and Jamaica; Management Sciences for Health (MSH) for refinement and field testing in the LAC region of its indicators for rational pharmaceutical management and for the installation of the INVEC drug inventory control system in Paraguay; the Urban Institute (subcontract from ISTI) for data analysis on the Honduras food programs cost-effectiveness analysis; and The Population Council (subcontract from ISTI) for monitoring of hospital-based breastfeeding promotion indicators in Honduras and Mexico.

### **C. Implementation Strategies**

The specific implementation strategies pursued by LAC HNS were developed through a close working relationship with LAC/DR/HPN. While the contract contained an illustrative list of deliverables for core and buy-in activities, to describe the types of products expected from LAC HNS (shown in Box 3), early in the contract implementation, LAC/DR/HPN issued two "Guidance Memoranda" to LAC HNS in 1991, clarifying the LAC Bureau's priorities and expectations with respect to the contract. The guidance memoranda stated that the contractor would not be asked to develop regional or country strategies; rather, LAC HNS would be asked to undertake special studies and technical analyses and case studies of cutting edge issues in the three substantive areas covered contract. LAC/DR/HPN directed LAC HNS to place greater emphasis on special studies on mutually selected topics (such as analysis of the recurrent costs of primary health care services), the refinement of indicators for assessing countries' management and financing policies and activities, and the development of tools for policy analysis.

**BOX 2**  
**LAC HNS Staff and A.I.D. Project Managers**

Tom Bossert	Project Director (1990-1994)
Tisna Veldhuyzen van Zanten	Administrative Director (1995)
John Holley	Technical Director (1995)/Management and Finance Advisor (1993-1995)
Jose Mora	Deputy Director (1993-1995)/Nutrition Advisor (1990-1995)
Lani Marquez	Associate Director/Administrative-Financial Officer (1990-1993, 1995)
Michelle Mendez	Administrative-Financial Officer (1993-1994)
Olga Sting	Administrative Coordinator (1992-1995)
Jack Galloway	Management Advisor (1991-1994)
Victor Jaramillo	Management Advisor (1990-1991)
Ricardo Meerhoff	Financing Advisor (1991-1993)
John Fiedler	Financing Advisor (1994-1995)
Tina Sanghvi	Nutrition Advisor (1990-1995)
Sally Crelia	Nutrition Analyst (1994-1995)
Sylvia Megret	Management Analyst (1993-1995)
Mimi Binns	Financing and Management Analyst (1994-1995)
Mary Delaney	Management Analyst (1993)
Cheryl Wickham	Nutrition Analyst (1992-1993)
Judith Sherman	Technical and Information Specialist (1991-1992)
Katarina Paddack	Information Dissemination Specialist (1990-1991)
Marco Fontes	Administrative Assistant (1995)
Kenya Urcuyo Valle	Bilingual Secretary (1991-1994)
Susan Beffel	Administrative Assistant (1990-1991)
Enrique Merino	Clerk/Typist (1995)
Ana Rita Puertas	Clerk/Typist (1993-1994)
Georgina Onofre	Clerk/Typist (1992)

**A.I.D. Project Managers:**

Nicholas Studzinski	LAC/DR/HPN (1990-1993)
Karen Nurick	LAC/DR/HPN (1993-1994)
Robert Emrey	G/PHN/HN/HPSR (1994-1995)

**BOX 3**  
**Illustrative Outputs for the LAC HNS Contract**

	<u>Core</u>	<u>Buy-in</u>
Technical assistance for project design	0	39
Technical assistance for project evaluation	0	23
Strategy analyses/studies	6	1
Regional/country strategies	5	14
Special studies/cross-cutting evaluations, operations research	9	23
Sector assessments/reviews	6	24
Database design/tracking systems	12	9
Development of output indicators	12	8
Information packets	24	0
Workshops	<u>9</u>	<u>19</u>
<b>TOTAL</b>	<b>83</b>	<b>160</b>

Mission-funded requests for LAC HNS technical assistance in project design and evaluation were not as high as that anticipated when the project was designed, particularly in the area of nutrition. In the latter half of the contract's implementation, USAID Missions in Paraguay, Jamaica, and Bolivia accessed LAC HNS for longer programs of comprehensive technical assistance in a number of areas related to health management and financing.

To compensate for the lack of Mission requests for nutrition-related technical services, LAC HNS pursued various strategies for increasing awareness among host country policymakers and USAID staff of cost-effective options for intervening on nutritional problems, which continue to be prevalent in the LAC region. These included special studies and policy guidelines defining linkages between nutritional interventions and other sectoral policies in health, agriculture and education, regional workshops, and a series of field studies to document the costs and effectiveness of specific nutritional interventions.

Another implementation strategy used by LAC HNS was to actively seek opportunities for coordination with other A.I.D.-funded projects, to share expertise and resources. This worked most effectively in the nutrition area, where joint field and special study activities were carried out with the MotherCare Project, the IMPACT Project, and the Wellstart Expanded Program for Breastfeeding. Another important LAC HNS initiative, at the behest of USAID Missions in Nicaragua and El Salvador, was to facilitate coordination in project planning with other major donor agencies in the health sector.

A mid-term evaluation of the LAC HNS contract was carried out in November-December 1992 by a team from John Snow, Inc. The evaluators concluded that the "contract has been competently administered and is providing high quality technical assistance in support of

USAID objectives. Activities developed tend to be appropriate and well executed."<sup>1</sup> The evaluation report supported LAC HNS plans to use a significant portion of core funds in the second half of the contract to address cost-effectiveness and sustainability issues in nutrition programs and the integration of nutrition into broader economic and agricultural development. The evaluators recommended that LAC HNS focus more on applied technical assistance and less on assessments and studies, strengthen its relationship with AUPHA, and actively explore opportunities to address issues related to expansion of private sector health services, social insurance, and cost containment in hospitals.

#### **D. LAC HNS Outputs**

Box 4 summarizes LAC HNS' actual outputs by source of funding. The result of LAC/DR/HPN directives and the actual demand from Missions for LAC HNS services was that the eventual list of products developed by LAC HNS differed substantially from the illustrative outputs shown in Box 3. Annex 1 provides a complete listing of LAC HNS outputs by component, organized by type of activity (i.e., policy tools and indicators, strategies and assessments, project design and evaluation, special studies, and workshops).

<b>BOX 4</b>		
<b>Summary of Actual LAC HNS Outputs</b>		
	<u>Funding Source</u>	
	<u>Regional</u>	<u>Mission</u>
Policy tools and indicators	9	0
Strategies and assessments	7	14
Project design and evaluation	2	11
Special studies	29	14
Workshops	11	14
Information packets	<u>12</u>	<u>0</u>
<b>TOTAL</b>	<b>70</b>	<b>53</b>

Section II of this report briefly describes these LAC HNS activities. Annex 2 summarizes all of the LAC HNS activities carried out by country, referencing sections of this report where they are discussed. Annex 3 provides a complete list of LAC HNS Technical Services Orders (TSOs), the mechanism specified in the contract for funding country-based technical assistance and for Missions to buy LAC HNS services.

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<sup>1</sup> Final Report: Mid-term Evaluation of the Health and Nutrition Technical Support Services (HNTSS) Project, John Snow, Inc. Arlington, VA, February 1993, p. ii.

## **E. Resources Expended**

Over the life of the contract, the total amount obligated to LAC HNS was \$10,663,580, of which \$7,815,000 consisted of regional funds and \$2,848,580 were Mission buy-ins. Total life-of-project expenditures are estimated at \$10,500,000 (pending final indirect rate adjustments).

The total level of effort provided under the contract was 850.69 person-months: 465.32 person-months of long-term personnel and 385.37 person-months of short-term technical assistance.

## **II. LAC HNS ACTIVITIES**

### **A. Health Management**

#### **1. Policy Analysis/Tools**

##### **■ Management indicators**

Following on an initial request from LAC/DR/HPN to develop indicators of the sustainability of management systems, LAC HNS developed a limited set of cost-effective indicators to characterize the adequacy of basic management systems to support primary health care services. Two sets of indicators were developed and field-tested in Guatemala and Ecuador. The first set proved to be most useful as an orientation tool for central level health care delivery organizations. The second set was shown to be quite effective as an assessment tool for the operational level. Cross-country comparisons were attempted, but it was concluded that such management indicators are most useful at the supervisory level rather than as means for characterizing national level systems.

##### **■ Pharmaceutical management indicators**

LAC HNS funded Management Sciences for Health (MSH) to refine and field test in Latin America a limited set of indicators for pharmaceutical management which MSH had developed in conjunction with the Pan American Health Organization and the World Health Organization. The contract supported field tests of the indicators in Ecuador, Guatemala, and Jamaica which aided considerably in their refinement. These indicators have proven to be very useful for assessing the state of pharmaceutical systems. To disseminate these indicators and encourage their utilization, LAC HNS jointly funded with the Rational Pharmaceutical Management Project a regional workshop in Bolivia for drug supply managers and other Ministry of Health officials from eight countries.

Total expenditures: \$ 86,676  
Funding source: LAC/DR/HPN regional  
Partner: Management Sciences for Health  
(Pharmaceutical Indicators)

## 2. Country Technical Assistance

### a. Short-term

- Project design (Bolivia PROCOSI, El Salvador Population Strategy, Peru SHIP and MAXSALUD)

Total expenditures: \$ 3,001,166  
Funding sources: USAID/Bolivia,  
USAID/Paraguay, USAID/Jamaica buy-ins;  
LAC/DR/HPN regional

At Mission request (although in the case of Bolivia, with regional funding), LAC HNS provided consultants to develop Project Concept Papers and subsequently, background technical analyses for the design of the PROCOSI II Project in Bolivia and the Strengthening Health Institutions and MAXSALUD Projects in Peru. A population specialist was provided at the request of USAID/El Salvador to assist the Ministry of Health in developing its national population strategy.

- Assessment (Chile technical assistance needs, INCAP strategic marketing, Nicaragua Pharmaceuticals and Private Sector, Mexico AIDS)

In response to Mission requests, LAC HNS performed a variety of short-term assessments to meet specific Mission or cooperating agency needs. These included preparation of a plan for short-term technical assistance to support the strengthening of primary health care services in Chile; a strategy for the Institute of Nutrition of Central America and Panama (INCAP) to market its services in a more client-oriented mode and increase the diversification of its funding sources; an assessment of issues and immediate needs to strengthen the availability of essential drugs in Nicaragua; as assessment of options for strengthening the private sector in Nicaragua; and an assessment of ongoing HIV/AIDS prevention activities in Mexico and propose options for USAID in the face of potentially reduced funding).

- Project evaluation (Eastern Caribbean AIDS Project)

In early 1991, at Mission request, LAC HNS fielded a team to perform the mid-term evaluation of the Eastern Caribbean AIDS Communication and Technical Support Project.

- PVO Sustainability (Dominican Republic, Central America)

LAC HNS staff made presentations on sustainability issues in two workshops organized by other USAID-funded projects for non-governmental organizations (NGOs) working in health and nutrition. The first was a workshop for some 15 non-governmental organizations providing child survival services in the Dominican Republic. The second was held in Guatemala for members of the La Leche League throughout Central America whose goal was to strengthen mother-to-mother support. The participating NGOs were given self-assessment tools to help them in analyzing their objectives and needs in strengthening both institutional and financial sustainability.

- Donor Coordination (Nicaragua, Guatemala, Jamaica)

With the concurrence of the respective USAID Missions, LAC HNS participated in health sector project design missions of the World Bank in Nicaragua and Guatemala for the purpose of facilitating better coordination of USAID and other donors' strategies and objectives in these countries, minimizing overlap, and increasing the effectiveness of donor resources. Facilitating communication and coordination with other donors was also part of the program of LAC HNS assistance to the Health Sector Improvement Project in Jamaica.

- b. Long-term

Through relatively large (over \$100,000) and multi-year Mission buy-ins, LAC HNS provided longer-term technical support for variety of issues related to improving health financing and management in three countries.

- Paraguay

This country program, funded through TSO #17, spanned three years and encompassed five areas of technical assistance to the Ministry of Public Health and Social Welfare: organizational development, management training, quality assurance, financial management and drug management. The initial activity was to analyze and propose alternatives related to the organization and structure of the central-level Ministry. This component later shifted to include issues of decentralization by focusing on the roles of the regional offices and hospitals.

Under the first USAID/Paraguay buy-in to LAC HNS (TSO #7), technical assistance had been provided to the Ministry to develop its 1992 health budget under a new program-based budget scheme mandated by the Ministry of Finance. As part of the TSO #17, LAC HNS developed and installed in the central Ministry a computerized budgetary control system which produced a wide variety of up-to-date reports. This system was adapted from a system originally developed for the Ministry of Health in Honduras through another USAID-funded project.

A large component of the technical assistance program consisted of management training for central and regional Ministry of Health staff carried out by LAC HNS subcontractor AUPHA. Nearly 200 operational level managers were trained in basic management. A number of executive seminars were also carried out to enhance the decision-making capacity of the Ministry.

At the request of the Ministry, pilot quality assurance projects were carried out in two hospitals. These efforts introduced the quality assurance methodology to the health sector in Paraguay and demonstrated its value as an effective strategy to improve quality of health care as well as begin to address some of the complex organizational issues facing the public hospitals.



The fifth component was the implementation of the INVEC computerized inventory control system in the central medical stores. Due to delays in construction and reorganization, the actual implementation was delayed until the end of the LAC HNS contract, at which point the system was functioning.

Much of the work carried out in Paraguay was accomplished by LAC HNS' local team of three staff members, supplemented by LAC HNS core staff and other experts for each component. This mix proved to be highly effective and efficient and was well received by both the USAID Mission and the Ministry of Health.

#### ■ Jamaica

Under two buy-in TSOs, USAID/Jamaica funded a three-year program of LAC HNS technical support to the USAID-funded Health Sector Initiatives Project (HSIP) and the Ministry of Health which included the management-related areas of divestment/privatization of hospital support services, pharmaceutical management, decentralization, and management training (see also Financing Country Technical Assistance below).

LAC HNS provided technical expertise in contract design and monitoring mechanisms for contracting out hospital support services; divestment plans were developed for specific non-clinical services of two hospitals; in collaboration with the local organization, Management Institute for National Development, management and quality assurance training was provided for Ministry of Health officials and staff in seven public hospitals in two regions; a patient satisfaction survey was carried out to assess the impact of hospital reform activities (including increased cost recovery) on patient satisfaction; and prescribing patterns for pharmaceuticals were analyzed to provide recommendations on how the Ministry of Health can rationalize pharmaceutical use in public hospitals. All of these efforts are considered to have strengthened the effectiveness of the HSIP and contributed to improved management in the health sector.

#### ■ Bolivia

Buy-in funded LAC HNS technical assistance activities in Bolivia focused on three large-scale action studies designed to enhance the ongoing health sector reform effort. The first study consisted of a series of six quality improvement efforts carried out in the Children's Hospital of La Paz. This effort introduced the quality assurance methodology in Bolivia and yielded not only positive results in that hospital, but also created a movement to replicate this methodology elsewhere in the country.

The second study was an effort to operationalize the decentralization policies created by the Law of Popular Participation which shifted power and resources to the municipal level. LAC HNS prepared a blueprint for implementation of a decentralized health system in one region, which is presently serving as a model for similar efforts in other regions. A series of

case studies were also produced to raise local consciousness of financial management issues under the new decentralization paradigm.

The third study was originally intended to be a replication of the decentralization study in a new region, but at the request of the Secretariat of Health, the focus was shifted to hospital cost recovery. Thirteen hospitals participated in a series of seminars and enacted programs designed to increase their financial viability. Actions included tightening of administration and means testing, variations of fees, and reduction of costs. This program is still underway, but would benefit from continued follow-up.

### 3. Special Studies

- **Costs, Quality and Cost Recovery of PHC in Bolivia**

Total expenditures: \$ 595,756  
Funding sources: LAC/DR/HPN regional, USAID/Bolivia  
Partner: Quality Assurance Project

This study was requested by USAID/Bolivia and the Bolivian Secretariat of Health to identify factors responsible for the ability of private sector PROSALUD clinics to recoup a larger portion of operating costs through user charges while charging same level of fees as MOH clinics. A national level workshop was organized in Bolivia by LAC HNS to present the findings. The study aided USAID/Bolivia's dialogue with the Ministry of Health on health financing reforms and led to follow-on technical assistance by LAC HNS to support decentralization of health services management and quality improvement activities in the public sector mentioned above.

- **Case study of innovative management experiences (Chile municipalization of primary health care)**

As part of a series of policy-oriented reports on health financing and management innovations in Chile, a case study was prepared on lessons from Chile's experience in turning over the management of primary health care services to municipal authorities.

- **Quality improvement and costs in hospitals**

In addition to the quality assurance programs in Paraguay and Bolivia previously mentioned, extensive activities were also carried out in Costa Rica and Guatemala, in conjunction with the A.I.D.-funded Quality Assurance Project. In Costa Rica, an initial program to establish pilot quality assurance activities in four hospitals/clinics of the Social Security Institute was expanded to seven facilities. Based upon the successful implementation of quality improvement activities in these facilities, the Social Security Institute, which is responsible for the delivery of all public health care in Costa Rica, has subsequently expanded the quality assurance programs to other regions of the country and has strengthened its central level Quality Assurance coordinating unit.

In Guatemala, quality improvement activities were initiated in five hospitals, but could not be completed due to significant political problems in the hospital sector. One hospital, however, did show significant results in lowering its post-operative infection rate for caesarean sections (from 25% to 11%) as a result of the initial study.

#### 4. Workshops

- Quality Assurance (Regional, Bolivia, Costa Rica, Jamaica, Paraguay)

Total expenditures: \$ 125,384  
Funding sources: LAC/DR/HPN regional, USAID/Paraguay, USAID/Jamaica buy-ins  
Partners: Quality Assurance Project, Rational Pharmaceutical Management Project

National and subnational level quality assurance awareness workshops were held in Bolivia, Costa Rica, Jamaica, and Paraguay during 1994 and 1995. The purpose of these seminars was to introduce the basic concepts of quality assurance and stimulate interest in undertaking quality assurance programs at the health facility level. Subsequently, in hospitals selected for participation in quality assurance activities, LAC HNS provided assistance in quality assurance implementation planning, training of quality coaches, and follow-up to review progress.

Following on the country-based quality assurance activities, a regional seminar on quality assurance was held in Quito, Ecuador in August 1995 with joint funding of LAC HNS and the Quality Assurance Project. This seminar enabled some 50 participants from 11 LAC countries to share their experiences and stimulated discussion on the role of quality assurance as a health reform strategy.

- Public/Private Sector (Paraguay)

In conjunction with the national workshop to present the results of the primary health care recurrent cost analysis carried out in Paraguay, LAC HNS organized a one-day seminar for about 50 senior Ministry and Social Security officials, representatives of the private sector and international donor agencies to present case studies of privatization and public-private collaboration in Costa Rica (privatization of the Pavas Clinic), Bolivia (PROSALUD) and Uruguay.

- Pharmaceutical Indicators (Regional)

Following on the dissemination of the field-tested pharmaceutical management indicators, LAC HNS co-sponsored with the G/PHN/HN/HPSR-funded Rational Pharmaceutical Management Project a regional workshop in Bolivia in September 1995 for drug supply managers from 8 countries to learn the procedures for applying these indicators in their countries.

## **B. Health Financing**

### **1. Policy Analysis/Tools**

- Financing indicators

Total expenditures: \$ 57,430  
Funding source: LAC/DR/HPN regional

In conjunction with the management indicator development task, LAC/DR/HPN directed LAC HNS to propose a limited set of cost-effective indicators to characterize a country's health care financing situation and help in the identification of areas for policy dialogue and financing strategy development. The financing indicators were field-tested in Guatemala and Ecuador in conjunction with the field test of the management indicators.

### **2. Country Technical Assistance**

- a. Short-term

- Nicaragua Financing Assessment

Total expenditures: \$ 485,494  
Funding sources: USAID/Nicaragua,  
USAID/Guatemala and USAID/Jamaica  
buy-ins; LAC/DR/HPN regional

In 1991, a LAC HNS consultant conducted a comprehensive analysis of the principal problems threatening the financial sustainability of the Nicaraguan health sector and outlined potential areas of technical assistance as an input to USAID's policy dialogue with the Ministry of Health.

- PHC Expenditures in Three Health Areas of Guatemala

Following on LAC HNS' national study of recurrent costs of primary health care (PHC) in Guatemala, a USAID buy-in funded a LAC HNS consultant to work with local health staff in three Health Areas to analyze recurrent costs of PHC services and use this information to develop budgets and plan activities.

- b. Long-term

- Jamaica

As part of the same three-year program of technical assistance funded under two TSOs from USAID/Jamaica, LAC HNS analyzed the Ministry of Health's total funding needs and evaluated an interim schedule of user fees which had been recently implemented in hospitals. LAC HNS' consultant recommended a revised fee structure for secondary and tertiary care which significantly increased the economic viability of the health sector. LAC HNS also conducted a preliminary analysis of cost recovery options in the primary health care system and recommended fee schedules for curative services and environmental inspections.

A concept paper on low-cost health insurance options was prepared in 1993. This was followed up in 1995 with review of lessons for Jamaica from national health insurance programs in other Caribbean countries and an assessment of the feasibility of a national health insurance program. The latter plan is now under consideration by the Ministry of Health.

### 3. Special Studies

- Recurrent Cost Analyses (Belize, Bolivia, Guatemala, Nicaragua, Paraguay, Peru)

Total expenditures: \$ 871,158  
Funding sources: LAC/DR/HPN regional;  
USAID/Nicaragua and USAID/Paraguay  
buy-ins

LAC/DR/HPN and LAC HNS decided in 1991 that the major regionally funded health financing initiative of the contract would be a multi-country analysis of the recurrent costs of primary health care services, as an input to efforts to focus Ministry of Health attention on how to improve the efficiency of such services. In response to USAID Mission interest, recurrent cost analyses were conducted in Belize, Bolivia, Guatemala, Nicaragua, Paraguay and Peru in the period between 1991 and 1993. An overall goal of the studies was to provide a regional comparison of unit costs to identify the most efficient PHC service delivery strategies and to refine a methodology for costing PHC services.

The studies employed budget-based expenditure data to document the level and composition of overall spending on primary health care and estimate unit costs, in most cases by obtaining data at disaggregated levels of the health system on personnel costs, drugs and other direct costs, and indirect or administrative costs. In conjunction with the Guatemala recurrent cost study, a computer model (called "GLIFO") was developed to link demographic and socioeconomic data with budgetary and service delivery information, as a tool for planning and resource allocation.

While cross-country comparisons did not prove feasible, results in individual countries were used to stimulate awareness of the cost implications of PHC service delivery strategies. The most important outcomes of the studies were the methodological lessons about practical approaches to costing public sector PHC services. These are discussed in a "lessons learned" report on the LAC HNS experience with PHC recurrent cost analyses which was prepared in 1995 and distributed to USAID Missions, relevant A.I.D. contractors and other donor agencies.

- Case studies of innovative financing experiences (Chile ISAPRE, Bolivia PROSALUD, El Salvador Patronatos, Costa Rica Pavas Clinic, Social Security, Social Security Innovations in El Salvador, Peru and Nicaragua)

In light of the contract's objective of increasing awareness of USAID HPN officers and host country officials of issues and innovative experiences in health financing, a strategy pursued

early in the contract was the preparation of case studies describing and drawing lessons from innovative financing experiences in LAC countries. Most of these case studies were commissioned for presentation at the HPN Officers' Conference on Health Financing and Sustainability in September 1991. Full copies of the cases were distributed to interested USAID Missions. Brief reports were prepared on most of the cases and disseminated as LAC HNS Financing Updates. Several of the cases were also presented in other regional and national workshops organized by LAC HNS.

#### 4. Workshops

- Technical Seminar on Health Financing and Sustainability at the 1991 LAC HPN Officers' Conference

Total expenditures: \$ 140,834  
Funding sources: LAC/DR/HPN regional;  
USAID/Nicaragua and USAID/Paraguay  
buy-ins

LAC HNS was asked by LAC/DR/HPN to organize a two-and-a-half day technical seminar on key issues and innovative experiences in health financing and sustainability as part of the regional HPN Officers' Conference in Miami in September 1991. The seminar focused on presentation of case studies of innovative financing alternatives and the preliminary findings from the first PHC recurrent cost analyses, but also included presentations on the persistence of nutritional problems in the region and LAC HNS plans to study the cost-effectiveness of nutrition interventions in order to draw attention to the continued relevance of nutritional interventions in the region. The seminar was attended by 45 HPN Officers, General Development Officers, A.I.D. Representatives and Foreign Service Nationals.

- Nicaragua Financing Policy

LAC HNS organized a two-and-a-half day seminar in March 1992 on behalf of USAID and with joint sponsorship by the World Bank and PAHO, to bring together high level officials of the Ministry of Health and Ministry of Finance to review experiences in health financing reform and discuss their relevancy for Nicaragua. The results of the LAC HNS primary health care recurrent cost study in Nicaragua were presented at the conference as well as a number of the financing case studies.

- Recurrent Costs (Guatemala, Paraguay)

National workshops were organized in Guatemala and Paraguay in 1992 to present the findings of the LAC HNS recurrent cost studies in each country. In Guatemala, a one day workshop was first held with Ministry of Health staff to review the study findings, methodology and recommendations, followed by a shorter seminar a week later to share the key findings and recommendations with senior officials from the Ministry of Finance and other donor agencies. In Paraguay, the recurrent cost study results were presented in a two-day seminar for about 110 Ministry of Health officials from the central level and the two regions where the cost study was implemented.

## **C. Nutrition**

### **1. Policy Analysis/Tools**

#### **■ Household Food Security Indicators**

In the first year of the contract, LAC/DR/HPN directed LAC HNS to assemble a team of economists and food and nutrition experts to develop indicators which would enable A.I.D. to quantify and monitor the impacts on household welfare and food security of development strategies emphasizing economic growth. The team's report reviews relevant literature, presents a conceptual framework relating policies and programs promoting economic growth to household and individual welfare, and proposes a small number of valid, sensitive and easy to collect economic and health/nutrition indicators.

Total expenditures: \$ 431,395

Funding source: LAC/DR/HPN regional

Partners: WELLSTART, INCAP, PAHO,

Population Council, Centro de Lactação de

Santos

#### **■ Curricula and Teaching Materials for Breastfeeding and Micronutrients**

As an outgrowth of a joint LAC HNS-PAHO survey of the breastfeeding curricula of health graduate training institutions in the region, LAC HNS collaborated with WELLSTART to develop a Lactation Management Curriculum for strengthening graduate training of health professionals in the area of breastfeeding and lactation management. LAC HNS funded WELLSTART to develop a Spanish version of its "Faculty Guide for Schools of Medicine, Nursing and Nutrition", prepared and tested by WELLSTART for use in the United States, and its review by a panel of university faculty from LAC countries.

In collaboration with INCAP, LAC HNS also supported the development of a set of Micronutrient Teaching Materials to be used for formal training in micronutrients in professional schools of medicine, nursing and nutrition in the LAC region. These materials provide the scientific and technical content that students need in order to acquire the necessary skills and competence to deal with micronutrient deficiencies at the individual and community level.

In collaboration with PAHO, WELLSTART, and UNICEF, LAC HNS conducted two sub-regional workshops in 1994 in South and Central America to review and discuss the proposed curricula. Both the breastfeeding curriculum and the micronutrient teaching materials were then revised based on consensus reached at the workshops. In late 1995, LAC HNS distributed copies of the breastfeeding curriculum (accompanied by a recommended textbook on breastfeeding) and the micronutrient teaching materials to the workshop participants to be used as tools to promote curricular changes in the universities in their countries.

## ■ Methodological Guidelines for CEA of Breastfeeding Promotion

A product of the LAC HNS breastfeeding promotion cost-effectiveness study in Honduras, Mexico and Brazil was the development of a practical manual describing how such analyses can be performed by non-economists. The guidelines were distributed to interested health economists, breastfeeding advocates, LAC HNS host country collaborators and other donor agencies with the recommendation that they be field tested.

## ■ Monitoring Systems for Breastfeeding Promotion Activities in Maternity Services

In follow-up to the cost-effectiveness study of hospital-based breastfeeding promotion, LAC HNS provided funding and technical support to the study counterparts to develop monitoring systems for breastfeeding promotion in Honduras, Mexico and Brazil. With funding from LAC HNS, The Population Council also played a role in the establishment of the monitoring systems by coordinating activities in Honduras and Mexico with key counterparts from the government, PVOs and other donors; providing technical support; monitoring and supervising the development phase of the monitoring systems; disseminating findings and encouraging continuation of the process of adaptation and institutionalization in each country's national program for breastfeeding promotion. In Brazil, LAC HNS provided support to the Centro de Lactação de Santos to field test and disseminate monitoring indicators for use at the hospital level.

## ■ Nutrition Policy Modules

As a final product of five years' efforts in studying nutrition programs and policies in the region, LAC HNS developed a set of sectoral policy guidelines that USAID Missions, the LAC Bureau and host-country policy-makers can use for decision-making related to investments in nutrition. These guidelines provide information on alternative policy options and concrete guidance to inform decisions regarding selection of the most appropriate and affordable mix of policies and programs in the health, agriculture and education sectors which are supportive of nutritional improvement. The preparation of the guidelines was coordinated by LAC HNS staff, with significant input from outside consultants with expertise in health, agriculture, and education and experience and familiarity with the policy environment in the region.

The draft guidelines in Spanish were presented to and discussed with selected key national planners and decision-makers responsible for sectoral nutrition policy formulation and implementation in two sub-regional workshops in Central and South America in July 1995. Feedback from the workshop participants was incorporated in the final version of the guidelines, which were distributed in November 1995 to workshop participants as well as to interested USAID and other donor agency representatives. The guidelines were translated to English and multiple copies sent to the Caribbean Food and Nutrition Institute, which had agreed to distribute them to sectoral policy-makers in the Caribbean countries.



## 2. Country Technical Assistance

### ■ Peru Nutrition Needs Assessment

Total expenditures: \$ 147,838  
Funding sources: LAC/DR/HPN regional;  
ROCAP buy-ins

In response to a request from the Ministry of Health to USAID for support to strengthen its capacity to plan, administer and evaluate nutrition programs, USAID/Peru requested that LAC HNS conduct an assessment of the nutrition-related training needs of regional health staff. The LAC HNS consultants also outlined the content for a series of short training courses for the Ministry's central and regional level personnel.

### ■ Technical Analysis for INCAP Institutional Strengthening Project Paper

Under the same ROCAP buy-in that funded the Strategic Marketing Assessment of INCAP, LAC HNS also provided a nutrition expert to prepare the technical analysis for the INCAP Institutional Strengthening Project Paper. The consultant's report assessed INCAP's needs for staffing, training and material support to upgrade its technical capabilities.

### ■ Mid-term Evaluation of the INCAP Institutional Strengthening Project

Under a second ROCAP buy-in, LAC HNS carried out the mid-term evaluation of the INCAP Institutional Strengthening Project in 1993.

## 3. Special Studies

### ■ Assessment of Trends in Food and Nutrition in the LAC Region

Total expenditures: \$ 2,223,234  
Funding source: LAC/DR/HPN regional  
Partners: PAHO, MotherCare Project, Centro de Lactação de Santos/Brazil, Ministry of Health/Honduras, Liga de la Leche/Honduras, National Nutrition Institute/Mexico, ADAI/Honduras, Urban Institute, Population Council, CARE/Honduras, Impact Project

In 1991, LAC HNS prepared a comprehensive review of nutritional trends and programs in the LAC region in the 1980s and outlined priorities for nutrition action. The assessment provided the technical rationale for the LAC HNS nutrition special study agenda.

### ■ Analysis of PL480 Title II Food Aid in the LAC Region

LAC HNS commissioned a study of the implications for PL480 Title II food aid programs in the LAC region resulting from provisions in the Agricultural Development and Trade Act of 1990. The study reviewed lessons learned from food aid programs in the region in the 1980s and identified ways of maximizing the effectiveness of such programs in the future. The

report was disseminated to all USAID Mission HPN and Food-for-Peace officers in the region.

- **Breastfeeding Assessments in the Bolivia, Dominican Republic and Guatemala**

In a joint activity with the MotherCare Project, LAC HNS carried out national assessments of the status of breastfeeding in Bolivia, the Dominican Republic and Guatemala. LAC HNS translated MotherCare's breastfeeding assessment guide to Spanish and provided international and local breastfeeding experts to conduct the assessments. LAC HNS also provided a consultant to coordinate a national workshop in the Dominican Republic for the Ministry of Health, private voluntary organizations (PVOs) working in child survival, and USAID and other donors to discuss the findings of the breastfeeding assessment and prepare a plan of action. Follow-up activities in the other countries were carried out by the Wellstart Expanded Program for Breastfeeding.

- **Nutrition Impact of the Promotion of Non-traditional Agricultural Exports in the LAC Region**

At LAC/DR/HPN request in 1992, LAC HNS commissioned a review of the latest literature on the impact on family income and food consumption of programs promoting non-traditional agricultural exports. The goal of this study was to inform the LAC Bureau on how agricultural sector programs could play a supportive role in improving nutrition and food security.

- **Field Test in Guatemala of the Workbook for Assessing the Economic Value of Breastfeeding**

LAC/DR/HPN requested that LAC HNS field test the "Guide to Assessing the Economic Value of Breastfeeding", a workbook which has been prepared by the Center to Prevent Childhood Malnutrition under a prior project, to aid policymakers in estimating the economic benefits and costs of changes in breastfeeding prevalence rates. A field test was arranged in Guatemala, with assistance from INCAP. The report to LAC/DR/HPN made recommendations for expanding the workbook's treatment of costs and effectiveness of breastfeeding promotion interventions.

- **Assessment of Breastfeeding Curricula in Medical, Nursing and Nutrition Schools in the LAC Region**

In 1992, LAC HNS collaborated with PAHO to design and implement a study to assess the current situation of pre-service training of health professionals regarding breastfeeding in 16 countries in the LAC region. Results of the study indicated that low priority was assigned to breastfeeding in the undergraduate and graduate curricula of health professionals and highlighted critical areas requiring considerable strengthening.

The findings were presented and discussed in two sub-regional workshops in 1994 attended by university staff responsible for curriculum development and teaching in the LAC region. Based on the recommendations of the participants, LAC HNS supported the translation to Spanish and adaptation of Wellstart's Lactation Management Curriculum for application in Latin America.

■ Nutrition Cost-Effectiveness Studies

A major special study area identified early on by LAC HNS staff as one where the contract could make a unique contribution was the measurement of the costs and effects of specific nutrition services. In consultation with LAC/DR/HPN and the Office of Nutrition, LAC HNS selected interventions for study which represent A.I.D.'s three major areas of investment in nutrition: breastfeeding promotion, micronutrients, and PL480 Title II food aid. Given the poor record of most nutrition programs in evaluating impact and the paucity of information on program costs, the LAC HNS cost-effectiveness studies sought to empirically measure program costs and effects and in so doing develop practical approaches which program managers could use to examine cost-effectiveness questions with respect to priority nutrition services. LAC HNS engaged leading experts to develop a conceptual framework for relating program costs and effects for each of the three intervention types. The methodologies and specific indicators developed have in turn advanced the state-of-the-art of nutrition cost-effectiveness analysis and will continue to yield payoffs for A.I.D. and other donor investments in nutrition by focusing attention on efficiency issues.

► *Breastfeeding Promotion Cost-Effectiveness Analysis (Brazil, Honduras, Mexico)*

From 1992-1994, LAC HNS collaborated with researchers in Brazil, Honduras and Mexico to assess the costs, coverage and quality of breastfeeding promotion through maternity services in seven hospitals. LAC HNS worked closely with the Centro Lactação de Santos in Brazil, the Ministry of Health and the Liga de la Leche in Honduras, and the National Center for Breastfeeding and National Institute of Nutrition in Mexico, in conducting the studies.

The findings of the breastfeeding cost-effectiveness study were presented at a regional conference organized by LAC HNS in Santos, Brazil in 1994, attended by breastfeeding advocates, university faculty and policy-makers from throughout the region. A summary cross-cutting analysis of the results and lessons learned from the three countries was printed in English, Portuguese and Spanish and disseminated in the three study countries as well as to A.I.D. contractors, donor agencies, and USAID Missions worldwide.

► *Vitamin A Cost-Effectiveness Analysis (Guatemala)*

To examine cost-effectiveness issues related to vitamin A delivery mechanisms, LAC HNS developed a study to address how prevention of vitamin A deficiency could be achieved most cost-effectively in Guatemala. Guatemala was selected for study because it has had in place

for a number of years three main vitamin A interventions: sugar fortification, oral capsule supplementation, and nutrition education/garden promotion. The Ministry of Health, CARE, INCAP, and the Sugar Producers' Association all cooperated in the study, which concluded that fortification was the most cost-effective option for combating vitamin A deficiency in Guatemala. The study also demonstrated that such an assessment can be undertaken rapidly using secondary sources of data. A final report presenting the methodology and findings of the study was disseminated throughout the LAC region and to selected micronutrient experts and advocates worldwide.

► *Iron Supplementation and Fortification Cost-Effectiveness Analysis (Jamaica)* L

Drawing on existing data from cost and effectiveness assessments undertaken by the Caribbean Food and Nutrition Institute and the University of the West Indies, this study examined two iron deficiency control programs in Jamaica: iron supplementation for pregnant women and fortification of cereal flour. The analysis compared the cost per woman benefitted of the existing programs with that of redesigned, improved programs to determine whether the cost-effectiveness of existing strategies can be improved at a reasonable cost. An important output of the study was the development of a methodological approach to evaluate the cost-effectiveness of iron supplementation and fortification programs.

► *Food Programs Cost-Effectiveness Analysis (Honduras)*

At the request of USAID/Honduras, LAC HNS designed a major empirical study to measure the household level effects of subsidies in the form of food versus cash (coupons) in the poorest regions of Honduras and to estimate the differences in the cost-effectiveness of these alternative forms of subsidies. The objective of the study was to quantify the food consumption, schooling, and health services utilization effects of the alternate forms of subsidies, in relation to program costs.

Technical direction for the study came from LAC HNS staff and consultants, with assistance from staff of the IMPACT Project. A local Honduran firm, Ateneo de Agro Industria (ADAI), was contracted directly by USAID/Honduras to carry out all primary data collection, data processing and initial data analysis, with training and oversight from LAC HNS. The Ministry of Education and the Ministry of Health of Honduras and CARE/Honduras cooperated in the study's implementation. Data analysis was carried out by the Urban Institute.

In terms of schooling effects, the results showed that both the food and the coupon programs have a positive effect as measured by school and income transfer outcomes, with the coupon programs showing a greater effect, and that both programs are well targeted towards the poorest segments of the population. In terms of health services utilization, the study found that the impact of food programs on the use of health services and on increased food consumption is higher, though at a higher cost, than that of the coupon programs. The

coupon programs proved more cost-effective in transferring income to the households but had no effect on increasing calories consumed or the use of health care facilities.

The study findings were presented and discussed with USAID/Honduras, the Ministry of Education, the Ministry of Health, CARE, and PRAF (the government agency responsible for the coupon program) in September 1995. LAC HNS also shared the results with the World Bank team in Honduras which supports the coupon programs to enhance their monitoring and evaluation strategies and improve the programs' design.

#### 4. Workshops

- Breastfeeding and Micronutrient Curriculum Development

Total expenditures: \$ 285,830  
Funding source: LAC/DR/HPN regional  
Partners: PAHO, WELLSTART, UNICEF, INCAP, FAO, Centro de Lactação de Santos

LAC HNS collaborated with PAHO/WHO, WELLSTART, UNICEF, and INCAP to organize two sub-regional workshops in November 1994 to discuss the results of the breastfeeding curriculum study and secure support for improving the teaching of breastfeeding and micronutrients in health professional school curricula. Participants included university professors from 18 LAC countries. At the recommendation of the workshop participants, LAC HNS funded WELLSTART to complete a revised, Spanish version of its Lactation Management Curriculum for distribution in the region and provided a curriculum specialist to INCAP to help the Institute develop its micronutrient teaching materials into a curricular format.

- Nutrition Policy Guidelines

LAC HNS, in collaboration with PAHO, UNICEF, and FAO, organized two sub-regional workshops in South and Central America to present the discuss the Nutrition Policy Guidelines. The guidelines were discussed with key national planners and decision-makers selected on the basis of their role as sectoral policy decision makers in the areas of health, agriculture, and education. The workshops also served as a forum for participants to present and discuss their national plans of action in nutrition. Workshop participants made recommendations for improving the practicality and relevance of the Nutrition Policy Guidelines, which were incorporated into the final version distributed by LAC HNS.

- Breastfeeding CEA in Santos, Brazil

In July 1994, LAC HNS and the Centro de Lactação de Santos sponsored a regional conference in Santos, Brazil, to present the results and methodology of the LAC HNS cost-effectiveness analysis of breastfeeding promotion in seven hospitals in Honduras, Mexico and Brazil. Some 70 participants attended, including breastfeeding advocates, university faculty, and Ministry of Health officials from seven LAC countries as well as representatives from

WELLSTART, PAHO, WHO and UNICEF. The conference also provided a venue for the exchange of experiences from national breastfeeding promotion programs and discussion of the policy implications of the LAC HNS studies. Participants also visited the highly successful breastfeeding promotion program in the Guilherme Alvaro Hospital.

#### **D. Information Dissemination**

A core function of the LAC HNS contract was to support the dissemination of information on health management, financing and nutrition to USAID Missions and key nationals, through regular informational mailings and the dissemination of technical reports.

Total expenditures: \$ 218,590  
Funding source: LAC/DR/HPN regional

##### **■ Mission Mailings and Management, Financing and Nutrition Updates**

The contract statement of work called for the distribution of information packets to USAID Missions on a bimonthly basis covering technical issues in health management, financing and nutrition, innovative experiences, and training opportunities. After the first two packets were distributed, LAC HNS conducted a survey of Missions to gain feedback on their utility. Missions that responded complained of being overburdened with voluminous information and requested that more concise approaches be used to communicate technical information. With approval from the LAC/DR/HPN Project Manager, the contract re-oriented its dissemination strategy to brief reports highlighting lessons or important issues from LAC HNS activities in management, financing and nutrition. These reports, referred to as LAC HNS Updates, were usually two pages in length and sent out in groups of two or three reports approximately every four months.

Beginning in the second year of the contract, the updates were translated to Spanish for dissemination to host country officials. A mailing list of about 150 English-speaking and 250-300 Spanish-speaking institutional contacts and interested individuals was developed over time for dissemination of the updates, encompassing USAID Missions, Ministry of Health officials, NGO representatives, university faculty, other A.I.D. contractors and donor agency representatives. A complete list of all the brief reports disseminated by LAC HNS appears in Annex 4.

##### **■ Technical Reports**

Full technical reports generated by LAC HNS technical assistance and special study activities were distributed on a targeted basis; that is, the distribution list for each report was determined on a case-by-case basis, usually in consultation with the A.I.D. Project Manager. Particular efforts were made to share reports with broad interest with all LAC USAID Missions and relevant A.I.D. contractors and donor agency representatives. A complete list of technical reports published by LAC HNS is presented in Annex 5.

### **III. LESSONS LEARNED**

#### **A. What Was Learned about Strategies and Approaches to Health Program Sustainability?**

LAC HNS employed a variety of strategies to enhance the financial and institutional sustainability of priority health services in LAC countries. These included comprehensive, longer term technical assistance programs, information dissemination, development of teaching materials and tools which enrich institutional capacity, and the development of monitoring and quality assurance systems.

##### *Country technical assistance programs*

- Longer-term country technical assistance programs with complementary activities are generally easier to manage and probably yield more sustainable results than single-visit efforts. Management and financing problems are typically inter-related and can best be approached simultaneously on several complementary fronts. Technical assistance activities can be designed to be complementary and mutually supportive, and concentrating resources in particular countries and activities will likely have a greater and more cost-effective impact than isolated interventions across many countries.

Another significant advantage is the possibility of having long-term technical assistance permanently assigned to a relatively large-scale program. With someone permanently available, problems and opportunities can be quickly and effectively be dealt with, and coordination with local authorities and with the USAID Mission becomes significantly easier.

- Follow-up is critical for the sustainability of management system improvements. Most LAC HNS activities had a life-span of less than a year, which is generally not enough time to create the basis for a sustained change. The longer term (i.e., covering 2-3 years) technical assistance programs developed by LAC HNS in Paraguay and Jamaica provided a framework for diagnosing problems and proposing solutions, supporting the implementation of management and financing improvements, and assessing and assuring their effectiveness over longer timeframes.

##### *Dissemination*

- Dissemination of results, experiences, and lessons learned is critical. This may take a variety of formats, including publications, lectures, seminars, etc.
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busy people were interested in receiving and did read. Feedback on this form of publication was universally positive.

- Convening regional workshops and meetings can be useful for enhancing sustainability if they have clear objectives and are well-structured. Shared experiences must be a part of this effort. A good example was the regional quality assurance seminar which greatly enhanced the networking of quality assurance advocates throughout Latin America.

#### *Development of teaching materials*

- The materials LAC HNS disseminated to enhance professional education related to micronutrient and breastfeeding will enhance the sustainability of these nutritional interventions, since they will enable vital technical information to become incorporated in the institutional curriculum of professional schools in the region. To improve acceptance and usability of such materials, it is important that potential users give input and share ideas for the improvement of such materials.

#### *Monitoring and quality assurance systems*

- Another useful mechanism for enhancing sustainability is the introduction of continuous monitoring systems. An excellent example of this was the breastfeeding monitoring systems which were established in Honduras, Mexico and Brazil as an outgrowth of the cost-effectiveness study.
- The quality assurance methodology has proven quite sustainable in that it provides concrete tools to front-line health workers to continuously monitor and improve the effectiveness of their own work. The success of quality assurance lies in the empowerment of health care providers to take responsibility for their activities. LAC HNS efforts in this area showed that this process has an important multiplier effect, as skills get transferred to personnel in other facilities.

### **B. What Was Learned about Resource Generation and Utilization?**

LAC HNS special studies and technical assistance focussed on the areas of costs, resource utilization and efficiency in nutrition interventions, cost recovery, and increasing the efficiency of resource management in the context of decentralization.

#### *Using cost information to improve program effectiveness and efficiency*

The primary lessons from the LAC HNS PHC recurrent cost studies were:

- Large, nationally-oriented cost studies are probably not as useful as focused studies with limited objectives and immediate applications for the information generated. The larger the scope of the cost study, the more variables, the longer the time required for data collection and processing time, and the less likely that the results will be affect specific policy decisions. The most useful costing exercises undertaken by LAC HNS were those conducted at a subnational (e.g., health area) level with the participation of local MOH staff.
- To reduce the effort required to implement them, recurrent cost studies should focus on health centers and hospitals rather than health posts since the opportunities to effect change in a small unit are limited, and data collection and processing costs for these health posts are relatively high.
- Cost data should be interpreted in light of contextual information about the type of services being delivered and the characteristics of the service delivery system.
- Cost studies should identify benchmarks against which to measure the performance of the study facilities. This will greatly facilitate interpretation of cost data in other places.
- Analysis of recurrent costs should become part of ongoing managerial processes, particularly in the context of decentralized health systems.

#### *Resource utilization in nutrition*

- Cost-effectiveness analysis is a powerful tool for making options for enhancing nutrition program effectiveness clear to program managers. The LAC HNS nutrition cost-effectiveness studies showed that such analyses can often be done with existing data.

#### *Strategies for cost recovery*

- The stimulation for cost recovery often comes from health personnel themselves who are interested in improving patient care. Hospitals, in particular, are very interested in increasing their independence and the quality of care, and are willing to try a variety of strategies which include improving collections and administrative systems, improved means testing, modification of tariffs, and cost containment.
- Quality assurance is one way to convince health personnel the importance of focusing on cost and revenue issues. To be effective, however, generated income must be permitted to remain at the institutional level and applied to quality enhancing activities.

### *Supporting decentralization*

Decentralization is probably one of the most important topics in health care for the next several years. Many countries in Latin America are engaging in some form of decentralization or are starting to discuss it.

- Decentralization is a process, not a pre-defined concept. There are a whole range of options for decentralization in health care.
- Support for decentralization must occur at all levels and not only at the lower level to which decision-making is being transferred. Technical support is needed to help each level assume its new roles and responsibilities.
- The development of human resources is critical. This may include the development of standardized systems, training in technical, managerial, and administrative skills, incentive systems, etc.
- Awareness and education of the public is critical to ensure that the strategies which evolve actually serve their needs.
- The potential for creating integrated, cost-effective systems with decision-making at lower levels of government is great, but to realize this potential will require a tremendous amount of support, capacity-building and political will. It is important to recognize that organizational change does not happen over-night. Technical cooperation agencies must be prepared to help in different ways over a long period of time.
- Establishing effective financial management mechanisms is critical and may be the key to the success of decentralization.
- Donors must be sensitive to the fact that many variants of decentralization exist and that each country must define, in a consensus-building process, its own model of decentralization.

### **C. What Was Learned about Tools and Strategies for Policy Development?**

#### *Policy guidelines*

- LAC HNS found a great demand for focussed materials which lay out specific policy options for host country and donor agency decision-makers. In the area of nutrition, such guidelines were particularly useful for highlighting policy and program options in various sectors that can improve a population's nutritional status.

### *Indicators*

LAC HNS developed and tested several series of management and finance indicators which could be used to rapidly and cost-effectively determine the general state of specific aspects of management, finance, and pharmaceuticals. LAC HNS' experience suggests that in general:

- There is an inverse relationship between ease of obtaining the indicators and their specificity. The more general an indicator is, the less useful it probably is. Most programs, projects, and organizations require more specific indicators rather than a generic set.
- Sets of indicators which focus on specific management systems, such as finance, maintenance, transport, and logistics are the most useful to program managers; this was the case with the pharmaceutical system indicators.
- Management indicators can provide very useful information as an aid to supervision at the operational level.
- Financing indicators are useful for stimulating policy dialogue, but should not be limited to the smallest list possible and must be combined with an understanding of the health sector context.

### *Case studies*

- LAC HNS used case studies extensively in relation to health financing because of perceived keen interest among USAID staff and host country officials to learn about experiences in other countries. There is a need for thoughtful efforts to analyze and disseminate the key lessons from specific country experiences in order to make them accessible to other countries.
- At the country level, LAC HNS produced a series of case studies to enhance awareness of the financial implications of decentralization in Bolivia. These seemed to be a very cost-effective means of creating a dialogue among people from different organizations. Case studies of this type, however, must be closely tailored to the needs of a particular country.

## **ANNEXES**

**ANNEX 1: LAC HNS Outputs**

**ANNEX 2: LAC HNS Country Activities Summary**

**ANNEX 3: LAC HNS Technical Services Orders**

**ANNEX 4: LAC HNS Updates**

**ANNEX 5: LAC HNS Publications**

**ANNEX 1**  
**LAC HNS Outputs**

<b>MANAGEMENT COMPONENT</b>	<b>Date Completed</b>	<b>LAC HNS Report No.</b>
<b>Policy Indicators/Tools</b>		
Management Sustainability Indicators	July 1991	Files
Management Indicators	June 1993	874,1034
Pharmaceutical Management Indicators	Mar 1994	834,835,908,909
<b>Strategies/Assessments</b>		
Chile Technical Assistance Concept Paper	Dec 1990	516
INCAP Strategic Marketing Assessment	June 1991	361
Nicaragua Private Sector Assessment	Aug 1992	712
Paraguay Technical Assistance Needs Assessment	Nov 1991	TSO #10 files
Paraguay Management Training Needs Assessment	Dec 1992	TSO #17 files
Paraguay MOH Reorganization Assessments/Diagnostic Studies	1991-1994	TSO #17 files
Paraguay Job Organization/Diagnostic Studies	1991-1993	TSO #17 files
Jamaica HSIP Strategic Plan	May 1992	790
Jamaica Feasibility Divestment of Hospital Support Services	Nov 1992	TSO #18 files
Jamaica Business Plan Pre-Paid Health Insurance	Feb 1995	TSO #25 files
Jamaica Bustamante Hospital Divestment Business Plan	Sept 1995	1116
Mexico AIDS Assessment	June 1993	962
El Salvador National Population Strategy Guidelines	May 1994	907
<b>PID/PP/Evaluations</b>		
Nicaragua Pharmaceuticals Concept Paper	Dec 1990	706
Nicaragua Pharmaceuticals Master Plan	May 1991	TSO #1 files
Bolivia PROCOSI PID	Jan 1991	TSO #3 files
Bolivia PROCOSI Project Paper	Mar 1991	TSO #3 files
Peru SHIP PP Social Analysis	Aug 1991	TSO #8 files
Peru SHIP PP Pharmaceuticals Analysis	Aug 1991	TSO #8 files
Peru MAXSALUD Concept Paper	Feb 1993	TSO #20 files
Peru MAXSALUD Project Paper	June 1993	TSO #22 files
AIDS Communication and Technical Support Project Mid-term Evaluation	Feb 1991	TSO #4 files
<b>Special Studies</b>		
Bolivia Quality/Costs Study (MOH-PROSALUD)	Sept 1992	741,783
Chile Policy Report #1--Decentralization	July 1993	910
Panama Social Security Study	Oct 1993	Files
Paraguay Job Organization/Procedures Manuals	1991-1994	TSO #17 files
Paraguay Job Function Manuals	Feb 1993	TSO #17 files
Paraguay Management Training Modules	1993-1994	TSO #17 files
Paraguay Personnel Study	Jan 1996	TSO #17 files
Paraguay INVEC System Design/Manual	Jan 1996	TSO #17 files
Jamaica Prescribing Practices Studies	Sept 95	872,1150
Jamaica Management Training Modules	1994	TSO #25 files
Jamaica Patient Satisfaction Study	Feb 1995	1097
Jamaica Access to Care Study	Feb 1995	1112
Bolivia Hospital del Niño Study	May 1995	1092,1093
Bolivia Capinota Decentralization Study	June 1995	1115
Guatemala Hospital Quality/Costs Study	Sept 1995	TSO #19 files

**ANNEX 1, Continued**

<b>MANAGEMENT COMPONENT, Continued</b>	<b>Date Completed</b>	<b>LAC HNS Report No.</b>
<b>Workshops</b>		
Jamaica HSIP Strategic Planning (National)	Apr 1992	TSO #15 files
Jamaica Health Sector Policy (with World Bank) (National)	Oct 1993	TSO #18 files
Jamaica Quality Assurance Introduction (National)	Mar 1994	TSO #25 files
Paraguay Public/Private Linkages (National)	Dec 1992	Files
Paraguay Quality Assurance Introduction (National)	Feb 1995	TSO #17 files
Paraguay Quality Assurance Results (National)	Aug 1995	TSO #17 files
Bolivia MOH-PROSALUD Study Presentation (National)	Mar 1993	Files
Bolivia Quality, Costs and Cost Recovery (National)	Feb 1994	Files
Bolivia Hospital del Niño Results (Subnational)	Nov 1994	TSO #24 files
Bolivia Capinota Decentralization Results (Subnational)	Mar 1995	TSO #24 files
Bolivia Hospital Cost Recovery Study Start-up (National)	July 1995	TSO #24 files
Bolivia Hospital Cost Recovery Results (National)	Sept 1995	TSO #24 files
Costa Rica Quality Assurance Introduction (National)	Nov 1993	TSO #26 files
Costa Rica Quality Assurance Results (National)	June 1995	TSO #26 files
Quality Assurance (Regional)	Aug 1995	1170
Pharmaceutical Indicators (Regional)	Sept 1995	Files

**ANNEX 1, Continued**

<b>FINANCING COMPONENT</b>	<b>Date Completed</b>	<b>LAC HNS Report No.</b>
<b>Policy Indicators/Tools</b> Health Financing Indicators	June 1993	#874
<b>Strategies/Assessments</b> Nicaragua Health Financing Assessment Paraguay Financing Information System Assessment	June 1991 June 1993	#365, #366 TSO #17 files
<b>Special Studies</b> Belize Recurrent Cost Study Guatemala Recurrent Cost Study Bolivia Recurrent Cost Study Paraguay Recurrent Cost Study Nicaragua Recurrent Cost Study Peru Recurrent Cost Study-Phase I Peru Recurrent Cost Study-Phase II Lessons Learned from LAC HNS Recurrent Cost Studies Costa Rica Pavas Clinic Case Study El Salvador Patronato Case Study PROSALUD Fee-for-Service Case Study Chile Social Insurance Innovations Case Study Jamaica Cost Recovery Study Jamaica Low-Cost Insurance Options Jamaica National Health Insurance Feasibility Privatization in Social Security Systems Paraguay Financing System Manual	Nov 1991 May 1992 Dec 1992 Apr 1993 Aug 1993 Oct 1993 Oct 1993 Oct 1995 Sept 1991 Oct 1991 Oct 1991 Jan 1994 Mar 1993 Nov 1993 Oct 1995 June 1995 Nov 1995	705,709 789,824,913 786,832 787 788 873 873 1094,1146 704 782 710 875 791,912,1118 TSO #18 files 1148 1113,1114 TSO #17 files
<b>Workshops</b> HPN Conference on Financing and Sustainability (Regional) Nicaragua Financing Policy (National) Guatemala Recurrent Costs (National) Paraguay Recurrent Costs (National)	Sept 1991 Mar 1992 May 1992 Dec 1992	Files TSO #14 files Files Files



## ANNEX 1, Continued

NUTRITION COMPONENT	Date Completed	LAC HNS Report No.
<b>Policy Indicators/Tools</b> Nutrition/Food Security Household Impact Indicators Nutrition Policy Modules Breastfeeding Curriculum Micronutrient Teaching Materials Guidelines for Breastfeeding CEA Monitoring Systems for Breastfeeding Promotion in Maternity Services	Aug 1992 Sept 1995 Sept 1995 Nov 1995 Oct 1995 Sept 1995	1044 1124,1162 1138 1154 1152 Files
<b>Strategies/Assessments</b> Current Trends/Regional Nutrition Strategy Peru Nutrition Training Needs Assessment Peru Nutrition Training Concept Paper Breastfeeding Assessment, Dominican Republic Breastfeeding Assessment, Bolivia Breastfeeding Assessment, Guatemala	June 1991 Feb 1992 April 1992 May 1992 July 1992 Aug 1992	358 523 TSO #11 files 708 711,713 785.1095
<b>PID/PP/Evaluations</b> INCAP Nutrition Technical Analysis for IISP PP INCAP Institutional Strengthening Project Mid-term Evaluation	May 1991 July 1993	363,364 784
<b>Special Studies</b> Field Test of Workbook on Breastfeeding Economic Value, Guatemala Food Aid Study Non-traditional Agricultural Export Promotion Study Study of Breastfeeding Teaching in LAC Region Vitamin A CEA, Guatemala Breastfeeding CEA, Honduras Breastfeeding CEA, Brazil Breastfeeding CEA, Mexico Breastfeeding CEA Cross-cutting Analysis CEA of Coupons vs. Food on Schooling Variables, Honduras CEA of Coupons vs. Food on KAP, Food Consumption, and Health Services Utilization Variables, Honduras Iron CEA, Jamaica	Oct 1991 June 1992 July 1993 Oct 1994 May 1994 June 1995 April 1995 July 1995 Sept 1995 Sept 1995 Sept 1995 Nov 1995	522 1043 1035 1053 950,1089 1132 949,1091,1132 951,952,1132 953,1132 954,1133,1135, 1136,1160 954,1134,1137, 1156,1158 1140
<b>Workshops</b> Breastfeeding/Micronutrient Curriculum Review--Central America (Regional) Breastfeeding/Micronutrient Curriculum Review--South America (Regional) Breastfeeding Promotion CEA (Regional) Nutrition Policy Guidelines Reviews--Central America (Regional) Nutrition Policy Guidelines Reviews--South America (Regional)	Nov 1994 Oct 1994 Dec 1994 July 1995 July 1995	1087 1088 1090 1120 1122

**ANNEX 1, Continued**

<b>SUMMARY OF LAC HNS OUTPUTS</b>	
<b>MANAGEMENT COMPONENT (Total = 56)</b>	
Policy Indicators/Tools	3
Strategies/Assessments	13
PP/PID/Evaluations	9
Special Studies	15
Workshops	16
<b>FINANCING COMPONENT (Total = 24)</b>	
Policy Indicators/Tools	1
Strategies/Assessments	2
PP/PID/Evaluations	0
Special Studies	17
Workshops	4
<b>NUTRITION COMPONENT (Total = 31)</b>	
Policy Indicators/Tools	6
Strategies/Assessments	6
PP/PID/Evaluations	2
Special Studies	12
Workshops	5
Total Policy Indicators/Tools	10
Total Strategies/Assessments	21
Total PP/PID/Evaluations	11
Total Special Studies	44
Total Workshops (8 Regional, 16 National)	24
<b>TOTAL OUTPUTS</b>	<b>110</b>

**ANNEX 2**  
**LAC HNS Country Activities Summary**

Country	Management	Financing	Nutrition
Belize		PHC recurrent cost analysis (p.14)	
Bolivia	PROCOSI Project design (p.8); technical assistance to the MOH in quality assurance, decentralization and financial management (p.10-11); costs/quality study (p.11)	PHC recurrent cost analysis (p.14); case study on PROSALUD (p.14-15)	National breastfeeding assessment (p.19)
Brazil			Breastfeeding promotion CEA (p.20); monitoring system for hospital-based breastfeeding promotion (p.17)
Chile	Technical assistance needs assessment (p.8); case study on municipalization (p.11)	Case study on ISAPRE (p.14-15)	
Costa Rica	Quality assurance pilot program (p.11)	Case study on Pavas Clinic (p.14-15)	
Dominican Republic	NGO sustainability workshop (p.8)		National breastfeeding assessment (p.19)

# ANNEX 2, Continued

Country	Management	Financing	Nutrition
Eastern Caribbean	ACTS Project evaluation (p.8)		
Ecuador	Management and pharmaceutical indicators field test (p.7)	Financing indicators field test (p.13)	
El Salvador	Population Strategy for MOH (p.8)	Case study on patronatos and Social Security innovations (p.14-15)	
Guatemala	Management and pharmaceuticals indicators field test (p.7); INCAP strategic marketing assessment (p.8); donor coordination (p.9); quality assurance study in hospitals (p.12)	Financing indicators field test (p.13); technical assistance to three health areas in cost analysis (p.13); PHC recurrent cost analysis (p.14); workshop on recurrent cost findings (p.15)	INCAP Institutional Strengthening Project Technical Analysis and mid-term evaluation (p.18); national breastfeeding assessment (p.19); field test of workbook for assessing economic value of breastfeeding (p.19); vitamin A CEA (p.20-21)
Honduras			Breastfeeding CEA (p.20); monitoring system for hospital-based breastfeeding promotion (p.17); coupon and food programs CEA (p.21-22)
Jamaica	Pharmaceuticals indicators field test (p.7); technical assistance to HSIP in divestment/privatization, pharmaceuticals management, decentralization, and management training (p.9,10)	Technical assistance to HSIP in cost recovery, insurance schemes (p.13-14)	Iron CEA (p.21)

# ANNEX 2, Continued

Country	Management	Financing	Nutrition
Mexico	AIDS Assessment (p.8)		Breastfeeding promotion CEA (p.20); monitoring system for hospital-based breastfeeding promotion (p.17)
Nicaragua	Pharmaceuticals and private sector assessments (p.8); donor coordination (p.9)	Financing assessment (p.13); PHC recurrent cost analysis (p.14); Social Security Innovations case study (p.14-15); financing policy workshop (p.15)	
Paraguay	Technical assistance to the MOH in organizational development, management training, quality assurance, financial management, and drug management (p.9-10); public-private linkages workshop (p.12)	Recurrent cost analysis (p.14); workshop on recurrent cost findings (p.15)	
Peru	SHIP and MAXSALUD project design (p. 8)	PHC recurrent cost analysis (p.14); Social Security Innovations case study (p.14-15)	Nutrition training needs assessment and plan (p.18)
Regional	Breastfeeding NGO sustainability workshop (p.8); quality assurance regional conference (p.12); pharmaceutical indicators regional workshop (p.12)	HPN Officers' Conference (p.15)	Breastfeeding curriculum study and workshops (p.16,19-20,22); Nutrition Policy Guidelines workshops (p.22); breastfeeding CEA workshop (p.22-23)

**ANNEX 3**  
**LAC HNS Technical Services Orders**

TSO No./ Country	Title	Effective Period	Amount Obligated
#1(B <sup>1</sup> )/Nicaragua	Essential Drugs and Health Financing Pre-PID Assessments	11/5/90-6/15/91	\$ 46,714
#2(D <sup>2</sup> )/Chile	Management/Operations Research Specialist to Develop Technical Assistance Plan	11/16/90-1/18/91	\$ 13,678
#3(D)/Bolivia	PROCOSI II Project Design	12/17/90-3/31-91	\$ 38,947
#4(B)/RDO/C	ACTS Project Mid-term Evaluation	1/15/91-2/19/91	\$ 49,560
#5(D)/RDO/C	ACTS Project Mid-term Evaluation	1/15/91-2/19/91	\$ 25,386
#6(B)/ROCAP	Support to Development of INCAP Institutional Strengthening Project	4/14/91-6/22/91	\$ 69,393
#7(B)/Paraguay	Development of 1992 Ministry of Health and Social Welfare Budget	5/8/91-12/31/91	\$ 121,884
#8(B)/Peru	Child Survival and Essential Drugs Analyses for SHIP Project Paper	6/26/91-8/14/91	\$ 25,676
#9(B)/Nicaragua	Assist with Major Reforms in MOH toward Private Sector Financing and Improving Operational Efficiencies	8/23/91-9/30/92	\$ 192,669
#10(D)/Paraguay	Health Management and Financing Needs Assessment for the Ministry of Health	11/8/91-12/13/91	\$ 24,481
#11(D)/Peru	Nutrition Training Needs Assessment	1/17/92-2/15/92	\$ 15,632
#12(B)/Bolivia	Study of Costs, Quality and Cost Recovery in MOH and PROSALUD Health Centers in Santa Cruz	2/12/92-6/30/92	\$ 39,809
#13(D)/Peru	Recurrent Cost Analysis Phase II	3/8/92-7/15/92	\$ 50,892
#14(B)/Nicaragua	Workshop on Health Financing and Analysis of Private Sector	3/20/92-9/30/92	\$ 67,693
#15(B)/Jamaica	Strategic Planning Assistance to the Health Sector Initiatives Project	3/29/92-5/31/92	\$ 29,544
#16(B)/Guatemala	Health Financing Technical Assistance to the Ministry of Health	4/14/92-9/11/93	\$ 55,003
#17(B)/Paraguay	Health Financing/Management Technical Assistance to the Ministry of Health	9/20/92-12/31/95	\$ 1,037,559
#18(B)/Jamaica	Health Financing/Management Technical Assistance to the Health Sector Initiatives Project	9/25/92-9/25/94	\$ 364,392
#19(D)/Guatemala	Improving the Quality and Efficiency of Hospital Health Care Services in Guatemala	11/22/92-9/30/95	\$ 87,864

<sup>1</sup>. B = Buy-in (Mission funding)

<sup>2</sup>. D = Draw-down (Regional funding)

### ANNEX 3, Continued

TSO No./ Country	Title	Effective Period	Amount Obligated
#20(B)/Peru	Development of Health Project Concept Paper	1/11/93-2/15/93	\$ 46,896
#21(D)/Mexico	Assessment of AIDS Programs	4/9/93-4/30/93	\$ 43,458
#22(D)/Peru	Development of Sustaining Child Survival Project	4/29/93-6/15/93	\$ 81,286
#23(B)/ROCAP	INCAP Institutional Strengthening Project Mid-term Evaluation	5/18/93-7/30/93	\$ 71,209
#24(B)/Bolivia	Assistance to the Ministry of Social Welfare and Public Health in Health Financing and Management	3/15/94-12/31/95	\$ 174,848
#25(B)/Jamaica	Support to Development of INCAP Institutional Strengthening Project	9/10/93-12/31/95	\$ 374,445
#26(D)/Costa Rica	Development of 1992 Ministry of Health and Social Welfare Budget	10/1/93-6/30/95	\$ 121,884

#### **ANNEX 4**

#### **LAC HNS Updates**

**May 1991. Health Management Update: Improving the Efficiency of Pharmaceutical Systems.**

**May 1991. Health Management Update: Field Report: Nicaragua. Ensuring the Availability of Essential Drugs.**

**May 1991. Health Management Update: Field Report: Chile Primary Health Care Improvement with a Focus on Quality Assurance.**

**May 1991. Health Financing Update: Workshop in the Works.**

**May 1991. Nutrition Update: Country Breastfeeding Assessments.**

**May 1991. Health Nutrition Update: Protein-Energy Malnutrition in A.I.D.-Assisted LAC Countries: A Major Constraint to Sustainable Child Survival.**

**November 1991. Health Management Update: Strategic Marketing: Its Relationship to Sustainability.**

**November 1991. Health Management Update: Field Report: INCAP Strategic Marketing: An Essential Step Towards Sustainability.**

**November 1991. Health Financing Update: Recurrent Cost/Expenditure Analysis.**

**November 1991. Health Financing Update: Field Report: Peru Recurrent Cost Analysis.**

**November 1991. Nutrition Update: Assessing the Impact of Economic Policies and Programs of the Poor: Nutrition and Food Security Indicators.**

**November 1991. Nutrition Update: Breastfeeding Promotion in Latin America and the Caribbean: A.I.D.-Assisted Activities.**

**February 1992. Health Management Update: Pharmaceutical Indicators.**

**February 1992. Health Financing Update: Nicaragua Workshop on Health Financing.**

**February 1992. Health Financing Update: Field Report: Belize Recurrent Cost Analysis.**

**February 1992. Nutrition Update: Regional Assessment on Lactation Management Training.**

**February 1992. Nutrition Update: Field Report: Peru Nutrition Training Needs Assessment.**

**February 1992. Nutrition Update: Assessing the Economic Value of Breastfeeding.**



#### **ANNEX 4, Continued**

**February 1992.** Nutrition Update: Maximizing Effectiveness of Food Aid in the LAC Region.

**October 1992.** Nutrition Update: Cost-Effectiveness of Breastfeeding Promotion: A Progress Report on the Study of Hospital-Based Interventions in Honduras. Spanish version: November 1992

**November 1992.** Health Management Update: Quality, Costs, and Cost Recovery: A Comparative Study of Public and Private Health Care Providers in Bolivia. Spanish version: December 1992.

**March 1993.** Health Financing Update: Recurrent Cost Analysis: Tools for Local Level Planning and Budgeting in Guatemala. Spanish version: September 1993.

**August 1993.** Policy Update: Chile, Decentralizing Primary Health Care Through Municipalization. Spanish version: September 1993.

**December 1993.** Health Financing Update: LAC HNS Recent Experience in Technology Transfer in Paraguay. Spanish version: February 1994.

**January 1994.** Health Management Update: Pharmaceutical System Management Indicators: A Methodology for Rapidly Assessing Drug System Performance. Spanish version: March 1994.

**January 1995.** Financing Update: Cost Recovery in Jamaica's Public Hospitals. Spanish version: February 1995.

**March 1995.** Health Management Update: Linking Quality and Costs: Quality Improvements at the Children's Hospital in La Paz, Bolivia. Spanish version: April 1995.

**March 1995.** Nutrition Update: Breastfeeding Curricula for Health Professionals in Sixteen Countries of the LAC Region: A Collaborative Study by LAC HNS-PAHO. Spanish version: April 1995.

**March 1995.** Nutrition Update: Proceedings of the Regional Conference on Promotion of Breastfeeding through Hospitals. Spanish version: April 1995.

**March 1995.** Nutrition Update: Costs and Effectiveness of Vitamin A Interventions: Guatemala Case. Spanish version: April 1995.

**May 1995.** Management and Financing Update: Divestment in Jamaica's Public Hospitals. Spanish version: June 1995.

#### **ANNEX 4, Continued**

**May 1995. Financing Update:** Lessons Learned from the LAC HNS Primary Health Care Recurrent Costs Studies. Spanish version: June 1995.

**May 1995. Nutrition Update:** The Costs and Cost-effectiveness of Breastfeeding Promotion in Maternity Services: the Brazil Case Study. Spanish version: June 1995.

**May 1995. Nutrition Update:** Strengthening the Training of Health Professionals in Breastfeeding and Micronutrient Interventions. Spanish version: June 1995.

**July 1995. Management Update.** Health Sector Reform and Quality Assurance in Costa Rica: Results of Facility-based Process Improvement Teams. Spanish version: August 1995.

**July 1995. Management Update.** Patient Satisfaction in Jamaica's Hospitals. Spanish version: August 1995.

**July 1995. Financing Update:** The Privatization of Health Care in Three Social Security Systems. Spanish version: August 1995.

**October 1995. Management Update.** Jamaica's Quality Assurance Program.

**October 1995. Management Update.** Latin American Conference on Quality Assurance in Health Care.

**October 1995. Nutrition Update:** Costs and Cost-effectiveness of School-based Feeding and Cash Transfer Programs in Honduras.

**October 1995. Nutrition Update:** Costs and Cost-effectiveness of Maternal and Child Feeding and Health Center-based Cash Transfer Programs in Honduras.

**October 1995. Nutrition Update:** Guidelines for Sectoral Policies for Nutrition Improvement.

**ANNEX 5**  
**LAC HNS Publications**

## **LAC HNS PUBLICATIONS**

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### **Health Management**

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712. McGriff, Dene, and Lewis Applegate. Assessment of Private Health Sector Options in Nicaragua. Washington, DC: LAC Health and Nutrition Sustainability (LAC HNS); August 1992.

741. Richardson, Paul; Jack Galloway, Manuel Olave, Patricia Terrazas, and Thomas Bossert. Quality, Costs and Cost Recovery: A Comparative Study of the Unidad Sanitaria of the Ministry of Health (MOH) and PROSALUD in Santa Cruz, Bolivia. Washington, DC: LAC Health and Nutrition Sustainability (LAC HNS); September 1992.

783. Richardson, Paul, Jack Galloway, Manuel Olave, Patricia Terrazas, and Bossert, Tom. Calidad, Costos y Recuperación de Costos: Un Estudio Comparativo de la Unidad Sanitaria del MSPPS y PROSALUD en Santa Cruz, Bolivia. Washington, DC: LAC Health and Nutrition Sustainability (LAC HNS); September 1992.

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872. Le Roy, Aida A. Prescribing Analysis Survey Results and Recommendations -- Ministry of Health -- Jamaica. Washington, DC: LAC Health and Nutrition Sustainability (LAC HNS); October 1993.

874. Holley, John. Ecuador: Prueba de Campo de los Indicadores de Gerencia y Finanzas. Washington, DC: LAC Health and Nutrition Sustainability (LAC HNS); Octubre 1993.

876. Paul Chen-Young and Associates. Corporatization of Health Corporation Limited - Final Report. Washington, DC: LAC Health and Nutrition Sustainability (LAC HNS); January 1994.
877. Ministerio de Salud Pública y Bienestar Social (MSPyBS) del Paraguay. Programa de Asistencia Técnica para el Fortalecimiento Institucional y Responsabilidad Financiera en la Administración de la Salud. Washington, DC: LAC Health and Nutrition Sustainability (LAC HNS); Junio 1993.
888. Paul Chen-Young and Associates. Corporatization of Health Corporation Limited - Interim Report. Washington, DC: LAC Health and Nutrition Sustainability (LAC HNS); December 1993.
907. Godwin, R. Kenneth. Lineamientos para una Estrategia Nacional de Población. Washington, DC: LAC Health and Nutrition Sustainability (LAC HNS); Mayo 1994.
908. Management Sciences for Health - Drug Management Program. Pharmaceutical Indicators: A Methodology for Rapidly Assessing Key Aspects of Drug System Performance. Washington, DC: LAC Health and Nutrition Sustainability (LAC HNS); March 1994.
909. Management Sciences for Health - Drug Management Program. Development and Test of LAC HNS Pharmaceutical System Management Indicators Matrix. Washington, DC: LAC Health and Nutrition Sustainability (LAC HNS); March 1994.
910. Bossert, Thomas. Policy Report No. 1 - Lessons from the Chilean Model of Decentralization: Devolution of Primary Care to Municipal Authorities. Washington, DC: LAC Health and Nutrition Sustainability (LAC HNS); July 1993.
962. Morch, S. Trier, Paul E. Raza, Nancy Sweeney, Gerardo de Cosio, Mary G. Delaney. Mexico AIDS Assessment. Washington, DC: LAC Health and Nutrition Sustainability (LAC HNS); June 1993.
1034. Holley, John. Indicadores Gerenciales Ministerio de Salud de Guatemala. Washington DC: LAC Health and Nutrition Sustainability (LAC HNS); Julio 1994.
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1093. Binns, Mimi, Juan C. D'Avis, John Holley, Tisna Veldhuyzen van Zanten. Calidad y costos: mejoramiento de la calidad en el Hospital del Niño de La Paz, Bolivia. Washington, DC: LAC Health and Nutrition Sustainability (LAC HNS); Abril 1995.

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